



IN THE CLAIMS

1-31. **(Canceled)**

32. **(New)** A method comprising:

receiving a request to establish an end-to-end network communication session between a subscriber unit in a wireless communication system and a data network access server through a first basestation;

determining whether the received request is a request for a new session or a request to handoff an existing session from a second basestation; and

generating, if the received request is a request for a new session and no communication session identifier is included in the request, a communication session identifier that uniquely identifies the session and accompanies the subscriber unit's access through any of a plurality of basestations.

33. **(New)** The method of claim 32, further comprising:

authenticating, if the request is a request to handoff an existing session, an existing communication session identifier received with the request.

34. **(New)** The method of claim 32, wherein determining comprises:

analyzing attribute-value pair(s) (AVP) of the received request to identify a callType AVP; and

identifying the received request as a request for a new communication session if the callType AVP is absent from the incoming call request, or if an identified callType AVP associated with the received request denotes a new call.

35. (New) The method of claim 32, wherein generating the communication session identifier comprises:

composing a deterministic element of the communication session identifier;
composing a random element of the communication session identifier; and
employing a mathematical function to generate the communication session identifier using the deterministic element and the random element.

36. (New) The method of claim 35, wherein the deterministic element is comprised of one or more of an electronic serial number (ESN) of the accessing subscriber unit, a media access control (MAC) address of the subscriber unit, and/or a telephone number associated with the subscriber unit.

37. (New) The method of claim 35, wherein the random element is comprised of one or more of a pseudo-random number, and/or a true random number generated from radio frequency (RF) energy of thermal noise associated with the communication session.

38. (New) The method of claim 35, wherein the mathematical function employed concatenates the deterministic element and the random element to generate the communication session identifier.

39. (New) The method of claim 35, wherein the mathematical function employed generates a hash of the deterministic element and the random element to generate the communication session identifier.

40. (New) An apparatus comprising:

a network interface to receive a request for an end-to-end network communication session between a wireless communication system subscriber unit and the apparatus through a first basestation; and

a communications agent to determine whether the received request is a request for a new session or a request to handoff an existing session from a second basestation; and

a session identification generator, invoked by the communications agent if the received request is a request for a new session and no communication session identifier is included in the request, to generate a communication session identifier that uniquely identifies the session and accompanies the subscriber unit's access through any of a plurality of basestations.

41. (New) The apparatus of claim 40, further comprising a security module to authenticate, if the request is a request to handoff an existing session, an existing and valid communication session identifier received with the request.

42. (New) The apparatus of claim 40, wherein the communication session identifier generated by the session identification generator comprises at least a deterministic element and a random element.

43. (New) The apparatus of claim 40, wherein the communications agent analyzes attribute-value pair(s) (AVP) of a received incoming call request control command to identify a callType AVP to determine whether an incoming call request indicates a new communication session or a handoff of an existing communication session.

44. (New) The apparatus of claim 43, wherein the communications agent invokes the session identification generator if the callType AVP denotes a new call, or if the callType AVP is not identified within the incoming call request control command.

45. (New) The apparatus of claim 42, wherein the session identification generator composes the deterministic element using one or more of an electronic serial number (ESN) of the accessing subscriber unit, a media access control (MAC) address of the subscriber unit, and/or a telephone number of the subscriber unit.

46. (New) The apparatus of claim 42, wherein the session identification generator composes the random element of the session identifier utilizing a pseudo-random number generator.

47. (New) The apparatus of claim 42, wherein the session identification generator composes the random element of the session identifier by generating a true random number from radio frequency (RF) thermal noise.

48. (New) The apparatus of claim 42, wherein the session identification generator composes a session identifier for the communication session by computing a function of one or more of at least the deterministic element and/or the random element.

49. (New) An article of manufacture comprising:

a machine accessible storage medium having stored therein a plurality of executable instructions which, when executed by an accessing computing device, cause an electronic system to:

receive a request to establish an end-to-end network communication session between a subscriber unit in a wireless communication system and a data network access server through a first basestation;

determine whether the received request is a request for a new session or a request to handoff an existing session from a second basestation; and

generate, if the received request is a request for a new session and no communication session identifier is included in the request, a communication session identifier that uniquely identifies the session and accompanies the subscriber unit's access through any of a plurality of basestations.

50. (New) The article of manufacture of claim 49 further to authenticate, if the request is a request to handoff an existing session, an existing and valid communication session identifier received with the request.

51. (New) The article of manufacture of claim 49, wherein the communication session identifier comprises a deterministic element and a random element.

52. (New) A method comprising:

receiving a request to establish an end-to-end network communication session between a subscriber unit in a wireless communication system and a data network access server through a first basestation;

determining whether the request includes a recognized communication session identifier (ID), an unrecognized communication session ID, or no communication session ID;

handing over an existing communication session to the first basestation from a second basestation if a recognized session ID is included in the request;

generating a new session ID if a communication session ID is not included in the request;
and

creating a new communication session between the subscriber unit and the data network access server through the first basestation when a new session ID is generated or identified.

53. (New) The method of claim 52, wherein a recognized session ID is included in the request when both a deterministic element and a random element of a session ID are included in the request and both the deterministic element and the random element are matched with values stored in a data management structure.

54. (New) The method of claim 52, wherein an unrecognized session ID is included in the request when both a deterministic element and a random element of a session ID are included in

the request but at least one of the deterministic element and the random element is not matched with a value stored in a data management structure.

55. (New) The method of claim 52, further comprising:

determining whether an unrecognized session ID in the request identifies a new session or a zombie session.

56. (New) The method of claim 55, wherein determining whether an unrecognized session ID in the request identifies a new session or a zombie session comprises:

identifying a new session if both a deterministic element and a random element of an unrecognized session ID are compared against values stored in a data management structure and there are no matches; and

identifying a zombie session if a deterministic element of the session ID matches a value stored in a data management structure and a random element of the session ID does not match any values stored in the data management structure.

57. (New) The method of claim 52, wherein creating a new communication session comprises:

identifying at a network access point a received request for a new communication session from the first basestation;

storing the session ID in a data management structure;

58. (New) The method of claim 57, wherein identifying the received request for the new communication session from the first basestation comprises:

analyzing attribute value pair(s) (AVP) of the received request to identify a callType AVP; and

identifying the received request as a request for a new communication session if the callType AVP is absent from the request or if an identified callType AVP associated with the request denotes a new call.